



OIPE

#2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,426

DATE: 01/28/2002

ENTERED

TIME: 11:39:27

Input Set : N:\Crf3\RULE60\10001426.raw
Output Set: N:\CRF3\01282002\J001426.raw

SEQUENCE LISTING

```
1 (1) GENERAL INFORMATION:
             (i) APPLICANT: HANDA, Hiroshi
      2
                             KAWAGUCHI, Haruma
      3
            (ii) TITLE OF INVENTION: DRUG-IMMOBILIZED PARTICLES AND A
      4
                                      PROCESS OF PURIFYING PROTEINS
      5
           (iii) NUMBER OF SEQUENCES: 13
      6
            (iv) CORRESPONDENCE ADDRESS:
      7
                   (A) ADDRESSEE: Dike, Bronstein, Roberts & Cushman, LLP
      8
      9
                   (B) STREET: 130 Water Street
     10
                   (C) CITY: Boston
     11
                   (D) STATE: MA
     12
                   (E) COUNTRY: USA
                   (F) ZIP: 02109
     13
             (V) COMPUTER READABLE FORM:
     14
     15
                   (A) MEDIUM TYPE: Diskette
                   (B) COMPUTER: IBM Compatible
     16
                   (C) OPERATING SYSTEM: DOS
     17
                   (D) SOFTWARE: FastSEQ Version 1.5
     18
            (vi) CURRENT APPLICATION DATA:
     19
                   (A) APPLICATION NUMBER: US/10/001,426
C--> 20
                   (B) FILING DATE: 02-Nov-2001
C--> 21
     22
                   (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     23
     24
                   (A) APPLICATION NUMBER: 09/440,597
     25
                   (B) FILING DATE:
     26
          (viii) ATTORNEY/AGENT INFORMATION:
                   (A) NAME: Corless, Peter F
     27
                   (B) REGISTRATION NUMBER: 33,860
     28
                   (C) REFERENCE/DOCKET NUMBER: 47115
     29
     30
            (ix) TELECOMMUNICATION INFORMATION:
                   (A) TELEPHONE: 617-523-3400
     31
     32
                   (B) TELEFAX: 617-523-6440
     33
                   (C) TELEX:
        (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     35
                   (A) LENGTH: 6 amino acids
     36
     37
                   (B) TYPE: amino acid
                  (C) STRANDEDNESS: single
     38
                   (D) TOPOLOGY: linear
     39
     40
            (ii) MOLECULE TYPE: peptide
     41
           (iii) HYPOTHETICAL: NO
            (iv) ANTI-SENSE: NO
     42
```

1/28/02

RAW SEQUENCE LISTING DATE: 01/28/2002 PATENT APPLICATION: US/10/001,426 TIME: 11:39:27

Input Set : N:\Crf3\RULE60\10001426.raw
Output Set: N:\CRF3\01282002\J001426.raw

```
(v) FRAGMENT TYPE: N-terminal
 43
        (vi) ORIGINAL SOURCE:
 44
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
 45
 46
          Gly Leu Asp Trp Val Lys
 47
    (2) INFORMATION FOR SEQ ID NO: 2:
 49
 50
         (i) SEQUENCE CHARACTERISTICS:
 51
              (A) LENGTH: 14 amino acids
 52
              (B) TYPE: amino acid
 53
              (C) STRANDEDNESS: single
 54
              (D) TOPOLOGY: linear
 55
        (ii) MOLECULE TYPE: peptide
       (iii) HYPOTHETICAL: NO
 56
 57
        (iv) ANTI-SENSE: NO
 58
         (v) FRAGMENT TYPE: N-terminal
        (vi) ORIGINAL SOURCE:
 59
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 60
          Ala Ala Gly Glu Gly Pro Ala Leu Tyr Glu Asp Pro Pro Asp
 61
                                                10
 62
64
    (2) INFORMATION FOR SEQ ID NO: 3:
         (i) SEQUENCE CHARACTERISTICS:
 65
 66
              (A) LENGTH: 10 amino acids
              (B) TYPE: amino acid
 67
              (C) STRANDEDNESS: single
 68
 69
              (D) TOPOLOGY: linear
 70
        (ii) MOLECULE TYPE: peptide
 71
       (iii) HYPOTHETICAL: NO
72
        (iv) ANTI-SENSE: NO
73
         (v) FRAGMENT TYPE: N-terminal
 74
        (vi) ORIGINAL SOURCE:
75
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
          Gly Ala Val Ala Glu Asp Gly Asp Glu Leu
76
                                                10
   (2) INFORMATION FOR SEQ ID NO: 4:
79
         (i) SEQUENCE CHARACTERISTICS:
80
              (A) LENGTH: 319 amino acids
81
82
              (B) TYPE: amino acid
83
              (C) STRANDEDNESS: single
              (D) TOPOLOGY: linear
84 .
85
        (ii) MOLECULE TYPE: peptide
       (iii) HYPOTHETICAL: NO
86
87
        (iv) ANTI-SENSE: NO
88
         (v) FRAGMENT TYPE: N-terminal
89
        (vi) ORIGINAL SOURCE:
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
90
91
          Met Pro Lys Arg Gly Lys Lys Gly Ala Val Ala Glu Asp Gly Asp Glu
.92
                                               10
. 93
          Leu Arg Thr Glu Pro Glu Ala Lys Lys Ser Lys Thr Ala Ala Lys Lys
94
                      20
```

RAW SEQUENCE LISTING DATE: 01/28/2002 PATENT APPLICATION: US/10/001,426 TIME: 11:39:27

Input Set : N:\Crf3\RULE60\10001426.raw
Output Set: N:\CRF3\01282002\J001426.raw

98	95 96	Asn	Asp	Lys 35	Glu	Ala	Ala	Gly	Glu 40	Gly	Pro	Ala	Leu	Tyr 45	Glu	Asp	Pro
99 Cys Ser Trp Asn Val Asp Gly Leu Arg Ala Trp Ile Lys Lys Lys Gly 100 65 70 75 80 101 Leu Asp Trp Val Lys Glu Glu Asp Ala Pro Asp Ile Leu Cys Leu Gln 85 90 95 103 Glu Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu Leu Gln Glu Leu 100 105 110 104 100 105 110 120 125 105 Pro Gly Leu Ser His Gln Tyr Trp Ser Ala Pro Ser Asp Lys Glu Gly 125 120 125 106 115 120 125 120 125 107 Tyr Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro Leu Lys Val Ser 130 135 140 109 Tyr Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly Arg Val Ile Val 110 145 150 155 160 111 Ala Glu Phe Asp Ser Phe Val Leu Val Thr Ala Tyr Val Pro Asn Ala 112 170 175 113 113 Gly Arg Gly Leu Val Arg Leu Glu Tyr Arg Gln Arg Trp Asp Glu Ala 180 185 190 194 194 194 195 196 194 194 194 194	97	Pro		Gln	Lys	Thr	Ser		Ser	Gly	Lys	Pro		Thr	Leu	Lys	Ile
100		Cvs		Tro	Asn	Val	Asp		Leu	Ara	Ala	Trp		Lvs	Lvs	Lvs	Glv
101		_	001				_	0-1		5				-1-	-1-	-1-	
Glu Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu Leu Gln Glu Leu 104 100 105 115 110 110 115 125 125 125 127 125 127 127 127 128 128 129 129 125 127 126 128 129 125 126 127 126 127 127 128 128 129 129 125 126 128 129 125 126 128 128 128 128 128 128 128 128 128 128	101	Leu	Asp	Trp	Val	Lys	Glu	ı Glu	ı Asp	Ala	Pro	Asp	Ile	e Leu	Cys	Let	ı Gln
104	102																
105			Thr	Lys	-		Glu	ı Asr	Lys			Ala	Glu	ı Leu			ı Leu
106			a 1.					. m				Dwa		. 3.00			
107			GIY			HIS	GII	ту	_		Ald	PIC	sei	_	_	, GIL	ı Gıy
108			Ser			Glv	Leu	ı Leu			Gln	Cvs	Pro			· · Val	Ser
Tyr Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly Arg Val Ile Val 110		_		_		. 017					, 011	1			1-		
111			Gly	, Ile	Gly	Asp	Glu	ı Glu	ı His	Asp	Gln	Glu	Gly	/ Arg	yal	. Ile	e Val
112 165 170 175 175 113 Gly Arg Gly Leu Val Arg Leu Glu Tyr Arg Gln Arg Trp Asp Glu Ala 180 180 185 190 115 190 115 190 115 190 115 190 115 190 115 190 116 195 200 205 117 205 117 205 117 205 117 205 205 117 205 205 117 205 205 117 205 205 118 210 215 220 225 230 235 240 119 225 230 235 240 121 205 225 245 230 235 255 240 121 205 245 250 255 255 255 255 255 226 255 255 255 255 226 255 255 226 255 255 226 255 25	110																
113			Glu	ı Phe	Asp			va]	Leu	ı Val			Туг	· Val	. Pro		
114			_	1	_				~1				•				
The Arg Lys Phe Leu Lys Gly Leu Ala Ser Arg Lys Pro Leu Val Leu 195 200 205		-	Arg	l GTA			. Arg	Let	ı Git		-	GIE	Arg	Trp			ı Ala
116			Aro	r Lvs			T.ve	: 613	, Tei			Aro	Lvs	: Pro			Leu
117				_				, , ,					-1-				
119			Gly	Asp	Leu	Asn	Val	Ala	His	Glu	ı Glu	Ile	Asp	Leu	. Arg	Asn	Pro
120 225 230 235 240	118	_	210)				215	5				220)			
121		-	_	/ Asn	Lys	Lys			ı Gly	Phe	Thr			Glu	Arg	g Glr	
122									**- 1	.					n b		
Leu Tyr Pro Asn Thr Pro Tyr Ala Tyr Thr Phe Trp Thr Tyr Met Met 124			GLY	Glu	Leu			1 Ala	ı vaı	. Pro			Asp	Ser	Pne	-	
124 260 . 265 . 270 125 Asn Ala Arg Ser Lys Asn Val Gly Trp Arg Leu Asp Tyr Phe Leu Leu 126 275 280 . 285 127 Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys Ile Arg Ser Lys 128 290 295 300 129 Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr Leu Ala Leu 130 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs			Tvr	· Pro	Acn			י דעד	- Ala	י יי			Trr	Thr	י דעד		
Asn Ala Arg Ser Lys Asn Val Gly Trp Arg Leu Asp Tyr Phe Leu Leu 275 280 285 127 Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys Ile Arg Ser Lys 128 290 295 300 129 Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr Leu Ala Leu 130 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs		Dea	-1-					, -] -		_							
Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys Ile Arg Ser Lys 290 295 300 129 Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr Leu Ala Leu 130 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs		Asn	Ala	Arg			Asn	val				Leu	Asp	туг	Phe	Leu	Leu
128 290 295 300 129 Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr Leu Ala Leu 130 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs	126			275					280)				285	,		
Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr Leu Ala Leu 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs					Leu	Leu	Pro			Cys	Asp	Ser	-		Arg	ser,	Lys
130 305 310 315 132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs					_		 , _			-1-	ml						_
132 (2) INFORMATION FOR SEQ ID NO: 5: 133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs				ı GIŸ	Ser	Asp			Pro) IIe	Tnr			. ren	Ala	Leu	l
133 (i) SEQUENCE CHARACTERISTICS: 134 (A) LENGTH: 31 base pairs				ON F	OR S	EO T						313	,				
134 (A) LENGTH: 31 base pairs																	
		(-,															
135 (B) TYPE: nucleic acid	135		(B)	TYP	E: n	ucle	ic a	cid									
136 (C) STRANDEDNESS: single								_	.e								
137 (D) TOPOLOGY: linear								r									
138 (ii) MOLECULE TYPE: cDNA		• •															
139 (iii) HYPOTHETICAL: NO 140 (iv) ANTI-SENSE: NO							,										
140 (IV) ANTI-SENSE. NO 141 (V) FRAGMENT TYPE:																	
142 (vi) ORIGINAL SOURCE:																	
		• •					TION	: SE	Q II	NO:	5:						•
143 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:	144	GTC	TCTC	GAG	ATGC	CGAA	GC G	TGGG	AAAA	A G							

31

RAW SEQUENCE LISTING

DATE: 01/28/2002 TIME: 11:39:27

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Input Set : N:\Crf3\RULE60\10001426.raw
Output Set: N:\CRF3\01282002\J001426.raw

```
146 (2) INFORMATION FOR SEQ ID NO: 6:
              (i) SEQUENCE CHARACTERISTICS:
     147
     148
                    (A) LENGTH: 31 base pairs
     149
                    (B) TYPE: nucleic acid
     150
                    (C) STRANDEDNESS: single
     151
                    (D) TOPOLOGY: linear
     152
             (ii) MOLECULE TYPE: cDNA
     153
            (iii) HYPOTHETICAL: NO
     154..
             (iv) ANTI-SENSE: NO
W--> 155
              (V) FRAGMENT TYPE:
     156
             (vi) ORIGINAL SOURCE:
     157
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                         31
     158
               ATGCGGATCC TTACAGTGCT AGGTATAGGG T
     160 (2) INFORMATION FOR SEQ ID NO: 7:
     161
              (i) SEQUENCE CHARACTERISTICS:
     162
                    (A) LENGTH: 11 base pairs
     163
                    (B) TYPE: nucleic acid
     164
                    (C) STRANDEDNESS: single
     165
                    (D) TOPOLOGY: linear
     166
             (ii) MOLECULE TYPE: cDNA
     167
            (iii) HYPOTHETICAL: NO
     168
             (iv) ANTI-SENSE: NO
W--> 169
              (V) FRAGMENT TYPE:
     170
             (vi) ORIGINAL SOURCE:
     171
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
     172
               TAACTAACTA G
                                                                                         11
     174 (2) INFORMATION FOR SEQ ID NO: 8:
     175
              (i) SEQUENCE CHARACTERISTICS:
     176
                    (A) LENGTH: 15 base pairs
     177
                    (B) TYPE: nucleic acid
     178
                    (C) STRANDEDNESS: single
     179
                    (D) TOPOLOGY: linear
     180
             (ii) MOLECULE TYPE: cDNA
     181
            (iii) HYPOTHETICAL: NO
     182
             (iv) ANTI-SENSE: NO
W--> 183
              (V) FRAGMENT TYPE:
     184
             (vi) ORIGINAL SOURCE:
     185
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
               ATTGATTGAT CCTAG
                                                                                         15
     186
     188
         (2) INFORMATION FOR SEQ ID NO: 9:
              (i) SEQUENCE CHARACTERISTICS:
     189
     190
                    (A) LENGTH: 32 base pairs
     191
                    (B) TYPE: nucleic acid
     192
                    (C) STRANDEDNESS: single
     193
                    (D) TOPOLOGY: linear
     194
             (ii) MOLECULE TYPE: cDNA
     195
            (iii) HYPOTHETICAL: NO
     196
             (iv) ANTI-SENSE: NO
W--> 197
              (V) FRAGMENT TYPE:
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PATENT APPLICATION: US/10/001,426

Input Set : N:\Crf3\RULE60\10001426.raw Output Set: N:\CRF3\01282002\J001426.raw

	198		ORIGINAL SOURCE:	
	199	• •	SEQUENCE DESCRIPTION: SEQ ID NO: 9:	
	200		GCCTCGAG ATGCCAGCCC TGTATGAGGA CC	32
		` '	RMATION FOR SEQ ID NO: 10:	
	203	(i)	SEQUENCE CHARACTERISTICS:	
	204		(A) LENGTH: 34 base pairs	
	205		(B) TYPE: nucleic acid	
	206		(C) STRANDEDNESS: single	
	207		(D) TOPOLOGY: linear	
	208		MOLECULE TYPE: cDNA	
	209		HYPOTHETICAL: NO	
	210		ANTI-SENSE: NO	
M>			FRAGMENT TYPE:	
	212		ORIGINAL SOURCE:	
	213		SEQUENCE DESCRIPTION: SEQ ID NO: 10:	
	214		GCCTCGAG ATGGATTGGG TAAAGGAAGA AGCC	34
		• •	RMATION FOR SEQ ID NO: 11:	•
	217	(i)	SEQUENCE CHARACTERISTICS:	
	218	•	(A) LENGTH: 32 base pairs	
	219		(B) TYPE: nucleic acid	•
	220		(C) STRANDEDNESS: single	
	221		(D) TOPOLOGY: linear	
	222		MOLECULE TYPE: cDNA	
	223		HYPOTHETICAL: NO	
	224		ANTI-SENSE: NO	
M>			FRAGMENT TYPE:	
	226		ORIGINAL SOURCE:	
	227		SEQUENCE DESCRIPTION: SEQ ID NO: 11:	
	228		GCCTCGAG ATGCCTTCGG ACAAGGAAGG GT	32
		• •	RMATION FOR SEQ ID NO: 12:	
	231	(i)	SEQUENCE CHARACTERISTICS:	
•	232		(A) LENGTH: 34 base pairs	
	233		(B) TYPE: nucleic acid	
	234		(C) STRANDEDNESS: single	
	235		(D) TOPOLOGY: linear	
	236		MOLECULE TYPE: cDNA	
	237		HYPOTHETICAL: NO	
	238		ANTI-SENSE: NO	
M>			FRAGMENT TYPE:	
	240		ORIGINAL SOURCE:	
	241		SEQUENCE DESCRIPTION: SEQ ID NO: 12:	2.4
	242		GCCTCGAG ATGTTTGACT CGTTTGTGCT GGTA	34
		• •	RMATION FOR SEQ ID NO: 13:	
	245	(1)	SEQUENCE CHARACTERISTICS:	
	246		(A) LENGTH: 17 amino acids	
	247		(B) TYPE: amino acid	
	248		(C) STRANDEDNESS: single	
•	249		(D) TOPOLOGY: linear	
	250	(11)	MOLECULE TYPE: peptide	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/001,426

DATE: 01/28/2002 TIME: 11:39:28

Input Set : N:\Crf3\RULE60\10001426.raw
Output Set: N:\CRF3\01282002\J001426.raw

L:20 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:21 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:141 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=5
L:155 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=6
L:169 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=7
L:183 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=8
L:197 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=9
L:211 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=10
L:225 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=11
L:239 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=12